

REMARKS

Claims 10-29, 33 and 35 are pending in this application. By this Amendment, claims 10, 24 and 35 have been amended to more particularly point out and distinctly claim the polybutene-1 and polypropylene components, support for which can be found at page 5, lines 3-5 and page 6, lines 13-17. Claims 36-39 are new, support for which can be found at page 4, line 32 to page 5, line 5; and page 6, lines 13-16. Entry and consideration of this amendment is earnestly requested in that it does not introduce new matter.

Claim Rejections

Rejections Under 35 U.S.C. § 102

A. Response to rejection of claims 10-29, 33 and 35 under 35 U.S.C. §102(b) as being anticipated by Dang et al.

In response to the rejection of claims 10-29, 33 and 35 under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 6,677,395 of Dang et al. ("Dang"), Applicants respectfully submit that the reference does not teach all the elements of the claims.

With respect to the Rejection under §102, for a reference to anticipate an invention, all of the elements of that invention must be present in the reference. The test for anticipation under section 102 is whether each and every element as set forth in the claims is found, either expressly or inherently, in a single prior art reference. *Verdegaal Bros. V. Union Oil Co. of California*, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). The identical invention must be shown in as complete detail as is contained in the claim. *Richardson v. Suzuki Motor Co.*, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989). The way in which the elements are arranged or combined in the claim must be disclosed, either expressly or inherently, in an anticipatory reference. *Therasense, Inc. v. Becton, Dickinson and Co.*, 593 F.3d 1325, 1332 (Fed. Cir. 2010) (citations omitted)

Dang relates to compositions containing irradiated, oxidized polymers, with working examples that include mixtures of an irradiated, oxidized propylene polymer with a non-irradiated propylene polymer, or an irradiated, oxidized polyethylene with a non-irradiated polyethylene. There are no examples showing mixtures of polypropylene and polybutene. The only example of an irradiated, oxidized material containing butene at all is Example 7, where an

ethylene/butene copolymer contains butene in an amount of only 9%. There are no examples of mixtures of different non-irradiated materials. There are also no examples of mixtures of irradiated, oxidized materials and non-irradiated materials having different carbon numbers (in the major component). Butene-1 as a majority component is thus not exemplified at all, either in Dang's irradiated, oxidized component or the non-irradiated component.

Moreover, Dang teaches irradiated, oxidized materials as dispersants. Dang does not teach non-irradiated materials as dispersants, or non-irradiated butene/propylene polymer systems as having dispersion capability. In fact, in Dang, the non-irradiated materials are the medium within which the additives are to be dispersed. They are not the dispersant itself.

With respect to the melt flow rate of the polybutene, the Examiner has argued that Dang teach a melt flow rate of 0.5 to 150. However, it is well-settled that where the prior art discloses an overlapping range, this properly constitutes anticipation only when the overlap describes the entire claimed range with sufficient specificity. *Atofina v. Great Lakes Chem. Corp.*, 441 F.3d 991, 999, 78 USPQ2d 1417, 1423 (Fed. Cir. 2006). In this case, the claimed ranges are different, and clearly are not the same as in Dang, and certainly have not been disclosed with sufficient specificity.

The Examiner further argues that Dang teach the use of additive in an amount of 9.0 to 85.0 wt%. However, it is well-settled that a genus will anticipate a species within that genus but not expressly disclosed if one of ordinary skill "would immediately envisage" the claimed compound from the disclosed genus. *In re Petering*, 301 F.2d 676, 682, 133 U.S.P.Q. 275, 280 (CCPA 1962) Certainly, one skilled in the art would not at once envisage the currently claimed range of additives in view of Dang.

With respect to claim 35, the additional materials of Dang would certainly materially change the characteristics of Applicants invention. As discussed above, Dang's irradiated, oxidized materials are clearly dispersing agents. Use of these materials would compete with and conflate the dispersion effects of the currently claimed system.

For all the reasons above, Applicants respectfully submit that Dang does not teach all the elements of the claims.

New claims 36-39

In addition to all the arguments presented above as to the patentability of the current claims, Applicants respectfully submit that new claims 36-39 present features that even more clearly distinguish the claims from the cited references. In particular, claim 36 relates to an embodiment of the concentrate where polypropylene is a propylene homopolymer and the polybutene is a homopolymer having a melting point of crystalline form 2 from 81 to 109°C. Claim 37 relates to an embodiment of the concentrate where the polypropylene is a propylene copolymer with ethylene and at least one of $\text{CH}_2=\text{CHR}$ alpha-olefins in which R is an alkyl radical with 2-8 carbon atoms, and the polybutene is a homopolymer having a melting point of crystalline form 2 from 81 to 109°C. Claim 38 relates to an embodiment of the concentrate where the polypropylene is a homopolymer, and the polybutene is a copolymer containing up to 30 mol% of comonomers selected from ethylene and alpha olefins containing from 5 to 8 carbon atoms and having a melting point of crystalline form 2 of 81 to 109°C. Claim 39 relates to an embodiment of the concentrate where the polypropylene is a propylene copolymer with ethylene and at least one of $\text{CH}_2=\text{CHR}$ alpha-olefins in which R is an alkyl radical with 2-8 carbon atoms, and the polybutene is a copolymer containing up to 30 mol% of comonomers selected from ethylene and alpha olefins containing from 5 to 8 carbon atoms and having a melting point of crystalline form 2 of 81 to 109°C.

Independent consideration of claims 36-39 is respectfully requested.

Applicants respectfully request that a timely Notice of Allowance be issued in this case. Should the Examiner have questions or comments regarding this application or this Amendment, Applicants' attorney would welcome the opportunity to discuss the case with the Examiner.

The Commissioner is hereby authorized to charge U.S. PTO Deposit Account 50-4380 in the amount of any fee required for consideration of this Amendment.

Respectfully submitted,

/William R. Reid/
William R. Reid
Registration No. 47,894
Attorney for Applicants

I hereby certify that this correspondence is being transmitted via the U.S. Patent and Trademark Office electronic filing system (EFS-Web) to the USPTO on August 3, 2011.

/Nancy Grimm/
Nancy Grimm, August 3, 2011

Dilworth IP, LLC
2 Corporate Drive, Suite 206
Trumbull, CT 06611
Attorney's Telephone No.: (203) 220-8496
Attorney's Fax No.: (203) 220-8497
Attorney's E-mail: wreid@dilworthIP.com